



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2017-0433; Product Identifier 2016-SW-078-AD; Amendment 39-19602; AD 2019-06-04]**

**RIN 2120-AA64**

**Airworthiness Directives; Bell Helicopter Textron Canada Limited Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Bell Helicopter Textron Canada Limited (BHTC) Model 429 helicopters. This AD requires inspecting each main rotor pitch link rod end bearing assembly (bearing) for wear and play. This AD was prompted by reports of worn bearings. The actions of this AD are intended to prevent an unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at

<http://www.bellcustomer.com/files/>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0433.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0433; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the Transport Canada AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email [david.hatfield@faa.gov](mailto:david.hatfield@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

On March 8, 2018, at 83 FR 9818, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to BHTC Model 429 helicopters, serial numbers 57001 and larger, with a bearing part number (P/N) 429-010-433-101 or 429-010-433-103 installed. The

NPRM proposed to require inspecting each bearing for wear and play. The AD was prompted by reports of worn bearings. The proposed requirements were intended to prevent a worn bearing, which could result in failure of a bearing, which could lead to reduced helicopter handling, damage to other components, and subsequent loss of helicopter control.

The NPRM was prompted by Canadian AD No. CF-2016-39, dated December 12, 2016 (Transport Canada AD CF-2016-39), issued by Transport Canada, which is the aviation authority for Canada, to correct an unsafe condition for BHTC Model 429 helicopters, serial numbers 57001 and subsequent. Transport Canada advises of reports of worn bearings adversely affecting the helicopters' handling qualities. Transport Canada states the scheduled inspection interval of 12 months or 800 hours is not sufficient to detect and correct a worn bearing under the current wear rate. Additionally, according to Transport Canada, the combination of the blade weight, positioning of the swashplate, and the preload of elastomers can make bearing play difficult to detect during a preflight exterior check. Transport Canada determined it necessary to implement an inspection frequent enough to detect a worn bearing in order to prevent a bearing from failing, adversely affecting handling qualities, and damaging adjacent components. These conditions could lead to loss of control of the helicopter. Transport Canada AD CF-2016-39 therefore requires inspecting bearing P/N 429-010-433-101/-103 for play and potential wear and replacing it if necessary, within 30 days from the effective date of its AD and at subsequent intervals not to exceed 50 hours air time.

### **Comments**

After our NPRM was published, we received a comment from one commenter.

**Request**

The commenter questioned the need for the proposed AD. The commenter stated that Bell Helicopter Alert Service Bulletin 429-11-03, which was issued in 2011, already requires inspections of the pitch link bearings.

We disagree. While an operator may incorporate the procedures in the Bell Helicopter Alert Service Bulletin into its maintenance program, not all operators are required to do so. In order for the corrective actions in the service information to become mandatory, and to correct the unsafe condition identified in the NPRM, the FAA must issue an AD.

**FAA's Determination**

These helicopters have been approved by the aviation authority of Canada and are approved for operation in the United States. Pursuant to our bilateral agreement with Canada, Transport Canada, its technical representative, has notified us of the unsafe condition described in the Transport Canada AD. We are issuing this AD because we evaluated all information provided by Transport Canada, reviewed the relevant information, considered the comments received, and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

**Differences Between this AD and the EASA AD**

This AD requires initially inspecting the bearing within 20 hours time-in-service, while the Transport Canada AD requires the initial inspection within 30 days.

## **Related Service Information Under 1 CFR part 51**

We reviewed Bell Helicopter Alert Service Bulletin 429-11-03, Revision A, dated January 13, 2015 (ASB), which specifies inspecting bearing P/N 429-010-433-101 and P/N 429-010-433-103 within 10 flight hours and every 50 hours thereafter for play and potential wear.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## **Costs of Compliance**

We estimate that this AD affects 64 helicopters of U.S. Registry and that labor costs average \$85 per work-hour. Based on these estimates, we expect the following costs:

- Inspecting the bearing requires 2 work-hours and no parts for a cost of \$170 per helicopter and \$10,880 for the U.S. fleet per inspection cycle.
- Replacing a -101 bearing requires 1 work-hour and \$3,560 for parts for a cost of \$3,645 per bearing. Replacing a -103 bearing requires 1 work-hour and \$3,365 for parts for a cost of \$3,450 per bearing.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2019-06-04 **Bell Helicopter Textron Canada Limited:** Amendment 39-19602; Docket No. FAA-2017-0433; Product Identifier 2016-SW-078-AD.

#### **(a) Applicability**

This AD applies to Bell Helicopter Textron Canada Limited Model 429 helicopters, serial numbers 57001 and larger, with a main rotor pitch link rod end bearing assembly (bearing) part number (P/N) 429-010-433-101 or 429-010-433-103 installed, certificated in any category.

#### **(b) Unsafe Condition**

This AD defines the unsafe condition as a worn bearing. This condition could result in failure of a bearing, which could lead to reduced helicopter handling, damage to other components, and subsequent loss of helicopter control.

**(c) Effective Date**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 20 hours time-in-service (TIS) and thereafter at intervals not to exceed 50 hours TIS:

(1) Inspect the upper and lower pitch link rod ends for axial and radial bearing play by rolling the bearings through all angles, paying particular attention to the areas depicted in Figure 1 of Bell Helicopter Alert Service Bulletin 429-11-03, Revision A, dated January 13, 2015.

(2) If there is any play in a bearing, remove the pitch link assembly and perform a dimensional inspection of the axial and radial bearing play. Measure the play at the angle that results in the maximum amount of play. Replace the rod end assembly before further flight if bearing play exceeds 0.010 inch for axial direction or 0.005 inch for radial direction.

**(f) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101



Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

The subject of this AD is addressed in Transport Canada AD No. CF-2016-39, dated December 12, 2016. You may view the Transport Canada AD on the Internet at <http://www.regulations.gov> in Docket No. FAA-2017-0433.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 6200, Main Rotor System.

**(i) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Bell Helicopter Alert Service Bulletin 429-11-03, Revision A, dated January 13, 2015.

(ii) [Reserved]

(3) For Bell Helicopter Textron Canada service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at <http://www.bellcustomer.com/files/>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on March 15, 2019.

Lance T. Gant,

Director, Compliance & Airworthiness Division,  
Aircraft Certification Service.

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